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Figure 1

Gai M K R D H H H H Q D **R** X T M M N E E D D G N C M D E L L A V L G Y K V R S S E M A D V A Q Q K L E Q L E V
0803 E A G G S S G G G S S A D M G S C R D K V M A G A X G E E E X V D E L L A A L G Y K V R S S D M A D V A Q Q K L E O L E M 54
60

Gai M E S N V Q E D D L S Q L A F E T V H Y N P A E L Y T W L D
0803 A E G M G G V T P P A Q R M E G S C R T W P R T K F I . . .

Figure 2a

CCCCGACGGTCGGCCGGCCAACCGCACGCCGCGCTGCCGGTGTGTTGG
TCGACACGCAGGAGGCCGGATTGGCTGGTGCACGCGCTGCTGGCGTGCACGG
AGGCCGTGCAGCAGGAGAACCTCTCCGCCGGAGGCCTGGTGAAGCAGATAAC
CCTTGCTGGCCGCGTCCCAGGGCGCGATGCGCAAGGTCGCCCTACTTCGG
CGAGGCCCTGCCCGCCGCTTCCGCTTCCGCCAGCCGGACAGCTCCCTC
CTCGACGCCGCTTCGCCGACCTCCACCGCGACTTCTACGAGTCCTGCCCTA
CCTCAAGTTCGCGCACTTCACCGCCAACCAGGCCATCCTGGAGGCCTGCCGGC
TGCCGCCGCGTGCACGTCGACTTCGGCATCAAGCAGGGATGCAGTGGCCC
GCACTTCTCCAGGCCCTGCCGCTCCGTCCCGGCCCTCCCTCGTTCGCCCTCAC
CGGCGTCGGCCCCCGCAGCCGGACGAGACCGACGCCCTGCAGCAGGTGGCTG
GAAGCTGCCAGTTCGCGCACACCATCCCGTCAACTCCAGTACCGCCGCC
TCGTCGCCGACGCTCGGGACCTGGAGGCCGTTATGCTGCAGCCGGAGGGCG
AGGAGGACCGAACGAAGANCCGANGTAATCGCCGTCAACTCAGTCTCGAGA
TGCACCGGCTGCTCGCGCACGCCGCCCTGGAAAAGGTTCTGGGACCGTGC
GCCCGTGCAGGCCAGAATTCTACCGTGGGAAACAGGAGGCAAATCACA
ACTCCGGCACATTCTGGACCGCTTCACCGAGTCTCTGCACTACTACTCCACCAT
GTTGATTCCCTCGAGGGCGGCAGCTCCGGCGGCCATCCGAAGTCTCATCG
GGGGCTGCTGCTGCTCTGCCGCCGGCACGGACCGAGGTATNTCCGAGGTGT
ACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGGGGGCGAACGCACAG
ANCGCCACGAGACGCTGGGCCAGTGGCGGAACCGGCTGGCAACGCCGGTTCG
AGACCGTCCACCTGGCTCCAATGCCTACAAGCAGGCGANCACGCTGCTGGCGC
TCTTCGCCGGCGGAACGGCTACANGTGGAAAGAAAAGGAAGGCTGCCTGACGC
TGGGGTTGCACACNCCCCCTGATTGCCACCTCGGCATGGCGCTGGCCGGGCCG
TGATCTCGAGTTGAACGCTGTAAGTACACATCGTAGCATGGAGGACAACA
CAGCCCCGGCGGCCGGCTCTCCGGGAACGCACGCACGCACCGACTG
AGAAGAAGAAGCTAAATGTCATGTCAGTGAGCGCTGAATTGAGCGACCGGCTA
CGATCGATCGGGCTACGGGTGGTCCGTCTGGCGTGAAGAGGTGGATGGA
CGACGAACCTCGAGCCGACCAACCACGGCATGTAGTAATGTAATCCCTCTCGT
TCCCAGTTCTCCACCGCCTCATGATCACCGTAAAACCTCTAAGCCCTATTATTA
CTACTATTATGTTAAATGTCATATTGCTATGTGTAATTCCCTCCAACCGCTCAT
ATCAAAATAAGCACGGGCCGGAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAA
AAAAAA

Figure 2b(1)

CGCGCAATGCTTAAGGTNCAGCCTACTTCGGNGCAGGCCCTGCCCGCCCGTCTTCGGCTTCCGCCCCGCACCTCCTCCCTCGACGCCGCTTCGCCGCACCTCCTCCACGCGACTTCTACNAGTCCTGCCCTACCTCAAGTTGCCGCACCTCACCGCCAATTAGGCCATCCTGGAGGCCTTCGCCGGCTGCCGCCGTGCACGTCGTCGACTTCGGCATCAAGCAGGGGATGCAGTGGCCGCACCTCTCCAGGCCCTGCCCTCGTCCCGCCCTCCCTCGTTCCGCCCTACCGGCCGTGGCCCCCGCAGCCGG

Figure 2b(2)

ACCTCCTCGTCGTCTNTNNGTGGGGGCCAGGAGCTTATGTGGTGGAGGNTGGCCCNCCGGTCGCGACCGCGNCCTACGNAGCGCCCGCGTGCCTGGCTGCGNGAGNCCGTGCAGCAGGAGAACCTCTCCGCCGCGAGGCGCTNGTGAAGNAGATAACCCNTGCTGGCCGAGTCCCAGGGCGGCAGAGATGNGCAAGGTNGCAGCTTACTTNGNAGANGCCCTCGCCCCGNGAGTGATTCCACTTANCGCCTGCAGCCGANAGCTCCGTCCTCGAANCCGNTTNGCCGACCTCCACGNGCACNTNTACGAGTC

Figure 2b(3)

TANTAGTCTCTCGGTGGGGGCCAGGAGCTCTNTGGTGGAGGCNGCCCCGCCGGTCGCGGCCGCAACCGACGCCCGCGTGCCTGGCTGCGACACG CAGGAGGCCGGATTGGATGGTGACGCCGTGNTGGCTGCGCGAGGCCGTGAAACAGTTGAAGGNCCNCGCTNNNNNCACAANNTGAAAGCCCCGNG

Figure 2b(4)

GGCTNCCCNCGTGCACGTCGACTTCGGCATCAAGCATGGATGCANTGGCNCGNACTTCTCCANGCCCTGCCCTCCGTCCCGCGGCCCTCCCTCGTCCGCCCTACCGGGCGTCGGCCCCCGCAGCCGGACGAGACCGACGCCCTGCANCAGGTGGCTGGAAAGCTCGCCAGTTCGCGCACACCATCCCGCTGACTTCCANTACCGTGGCTCGTCGCCGACGCTCGCGACCTGGAGGCCGTTATGCTGCANCAGGGAGGGCGAGGAGACGGAGCCGAGGTAATCGCCGTCAACTCAGTCTCGAGATGCAACCGGGCTGCTNCGCANCAGGGCGACNCTGGAANAA

Figure 2b Continued

Figure 2b(5)

CAAGANGCTAATCACAACTCCGGCACATT CCTGGACCGCTTCACCGAGTCTCTGC
 ANTACTACTCCACCATGTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGGCCGGCCC
 ATCCGAAGTCTCATCGGGGGCTGCTGCTCCTGCCGCCGGCACGGACCAT
 GTCATGTCCGAXGTGTACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGG
 GGGCGGAGCGCACANTANGCCACGCAGACNCTGGGCCAGTGGCGTAACCGGC
 TGGGCAACGCCNGGTTCANNNCCGTCCACCTGGCTCCAATGCCTACAATCAN
 GCNNNCACGCTGCTGGCGCCTTCGCC

Figure 2b(6)

TCGCCANTCGGCATGGNGCCTGGCCGGCGTGATCTCGCGAGTTTGAACGCTG
 TAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCGGCCGGCT
 CTCCGGCGAACGCACGCACGCACCGCACTTGGAGAAAGAANAAGCTAAATGTCAT
 GTCAGTGAGCGCTGAATTGCAACGACCGGCTACGATCGATCGGGCTACGGGTGG
 TTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACCTCGANCCGACCAC
 CACCGGCATGTAGTAATGTAATCCCTTCTCGTCTCCAGTTCTCCACCGCCTCCAT
 GGATCACCCGTAAAACCTCTAACGCCCTAATTATNACTAACTAATTATGTTTAA
 AATGTTCTAATTAAATTGGCTATGTTGTAATNCCTCCAAACCGGCTCATTTCAAA
 NATTAAGCCACGGGCCCGAACCTTGGTTAACAAACCTCCNATTGNAAAATTNA
 AATNGAAATTTTGGTTNC

Figure 2b(7)

GTTGGTGGNGGCATTGGGTACAAGGTGCGCGCCTCCGACATGGNGGANGTGG
 GGCAGAAGCTGGAGCAGNTCGAGATGGCCATGGGGATGGGNGGCGTGGCGCT
 GGCGCCGCCCTGACGACAGGTTNGCCACCCGCGGGACACNGTGCANT
 ACAACCCCACNGACNTGTCGTCTGGGTGAGAGCATGCTGCGAGCTAAANG
 AGCCGNGCCGCCCTCCGCCCGCCCCGAGCTCAACGCCTCCACCTCCTCCAC
 CGTCACGGCAGCGCGGGCTACTTCGATAACCTCCNATTGNAAAATTNA

Figure 2b(8)

TGATGGNGGAGNTTANGGTTANAAATGTGGGGANTCCGAANNNGTGAGG
 ANATATNNTCAGAACGTTGGAGCAGATGAGAGATNGCTGATGGGGATAGGGTAGG
 NGTGGGTGCCGGTGCNGCCCCNAGGANAGATTGCCACCCACTTAGCAAGTGG
 ANACCGTGGATTACNACCCCACAGACCTGTCGTGGTTGGGTTGAGAGCGTGGTG
 TGGGAGCTGAACGGGCNGCGCGTGCCTCCGCCCGCCCCGAGCTCAACGCC
 TCCACCTCCACCGTACACGGCAGCGGGCTAGTCGATCTCCGCCCTCC
 GTCGACTCCTCCAGCAGCATNTANGCGCTCGGGCGATCCCTNCCCAAGCNGC
 GNNGNCCGAGCGTGTAN

Figure 2b Continued

Figure 2b(9)

TTTCANTTICNTCTTTTCTTCTTTCCAACCCCCGGCCCCNGACCCTTGGAT
CCAAATCCCGAACCCGCCCCAGAACCNNGAACCGAGGCCAAGCAAAAGNTTTG
CGCCAATTATTGGCCAGAGATAGATAGAGAGGGCAGGTAGCTCGCGGATCATGA
AGCGGGAGTACCAAGGACGCCGGAGGGAGCGGCAGGCGGGCATGGGT
TCGTCCGAGGAAGATGATGGTGTGGCGGGCGGGGGAGGGGGAGGGAGGT
GGACGAGCTGCTGGCGCGCTCGGTACAAGGTGCGCGCCTCCGACATGGCGGA
CGTGGCGCAGAAGCTGGAGCAGCTCGAGATGGCCATGGGGATGGCGGGCGTGGG
CGCCGGCGCCGCCCCGACGACAGCTCGCCACCCACCTCGCCACGGACACCGTG
CAGTACAACCNCCCNGACC

Figure 2b(10)

GGACGACGACCTCCGAGCCGACCACCAACGGCATGTAGTAATGTAATCCCTTCTT
CNTTCCCAGTNCTCCACCGCCTCCATGATCACCGTAAAACCTCTAAGCCCTATT
ATTACTACTATTATGTNTAANTGTCTATTATTGCTANGTGTAAATTCTCCAACCGC
TCATATCAAATAAGCACGGGCCGGACTTTGTTANCAGCTCCAATGAGAATGAA
ATGAATTTGTACGCAAGGCACGTCCAAAACGGCTGAGCTTGTCTGTTCTG
TTATGTTCATGGTGCCTACTGCTCTGATGAACATGATGGTGCCTCCAATGGTGGC
TTTGCAATTGTTGAAACGTTGGCTGGGGACTTGNGTGGGTGGGTGCATGGGG
ATGAATAATTCACATCNCCGGATAAAATTAAGCCATCCCCTGGCCGTCCTTGA
ATANCTGCCNAAACGAAATTCCCCCNATC

Figure 2b(11)

AAANCCTANAANATATAGAGGCGATGTNGCNCCCCNATCANNAAACNGGATTACN
GNAACNCNGAAGGAGCGGGCGGCGGTGGCAGCATNGGCTCGTCCGATGACA
AATATCATGGTGTGGCGGGCGGGGACGGGGAGGAGGTGCACAACNTTNG
GCGGGACTCGNGTACCACTGTGNACGGTGCGCNCTNGNGGATNTGGCCCTNGAA
GATGGGCCACCTCCAAA

Figure 2b Continued

Figure 2b(12)

CGGCGGCCCCGTGGCGGCATGGGCTCGTCCGAGGACNAGATGATGGTGTGGCG
GCGGCGGGGGANGGGATGATGTGGACTATCTGCTGGCGCGCTGGGTACAAG
GTGCGCGCCTCCGACAGGCGGAGCCC CGCATAACTGGAGGCCGCTCGAGATGGC
CNTGGGGATNGGCGGCNTGGCNCCNGCGCCTCCCCG

Figure 2b(13)

TGGNGCTCGGGTGNCCGTGCGCGCCTCCGACATGGCGGGACGTGGCGCAGAAC
TGGAGCAGCTCGAGATGGCATGGGGATGGCGGGGTGGCGCCGGCGCCGCC
CCGACGACAGCTTCGCCACCCACCTCGCCACGGACACCGGCACACAACCCACCG
ACCTGTCGTCTGGGTGAGAGCATGCTGCGGATCTCNACGCGCCNCCGNCGCC
CCTCCGCCCCG

Figure 2c(1)

ANNTTGTNCNNNTACATCCCATGNGCCGCGNATGCTNAAGGTGCCGCCACT
 TCGGCAGGCCCTCGCCCGCGTCTTCGCTTCCGCCAGCCGGACAGCT
 CCCTCCTCGACGCCGCTTCGCCGACCTCCTCACCGCACTTCTACGAGTCCTGC
 CCCTACCTCAAGTTCGCGCACTTCACCGCAACCAGGCCATCCTGGAGGCCTCG
 CGCGCTGCCGCCGCGTGCACGTCGACTTCGGCATCAAGCAGGGGATGCAGT
 GGCGCGACTTCTCCAGGCCCTGCCGCCGCGCCCTCCCTCGTCCGC
 CTCACCGCGTTGGCCCCCGCAGCCGACGANAACGACGCCCTG

Figure 2c(2)

NTTCCCCGGCAGTTAAAAGCNTCCACTTCTCCACCGTCACGGGAGCGGGCGGNT
 ACTTNGATCTCCGCCCTCAGTCGACTCCTCAGCAGCATCTACGCGCTGCGGCC
 GATCCCCCTCCCCGGCCGGCGACGGCGCCGCCGACCTGTCCGCCGACTCCGTG
 CGGGATCCCAAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCGTATCCTCCT
 CATANTCGTCTCTCGTGGGGGCCAGGAGCTGTGGTGGAGGCNGCCCCGCC
 GGTCGCGGCCGCCAACCGCACGCCGCTGCCGGTGTGGTCAAC
 GCAGGAGGCCGGATTGGATGGTGACCGCCTGNTGGGTGCGCGAGGCCGT
 GNAAGCAGTTNGAAGGGCTNCGGTGNATNNCGCAACAANNNGGAAGNCCN

Figure 2c(3)

CANCCCGCTGNTGCCACCTCGGCATGGCGCCTGGCCGGGCCGTGATCTCGCGAG
 TTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAAACACAGCCCCGGCG
 GCCGCCCGGCTCTCCGGCGAACGCACGCACGCACCGTGAAGAAGAAGAAG
 CTAAATGTATGTCAGTGAGCGCTGAATTGCANCACCGGCTACGATCGATCGG
 GCTACGGGTGGTCCGTCCGTGAAGAGGTGGATGGACGACGAACCTCC
 GANCGACCACCACCGGATGTAGTAATGTAATCCCTCTCGTCCAGTTCTC
 CACCGCCTCCATGATCACCCGTAAAACCTCTAACGCCATNNNTTACTACNATT
 AATGTTTAAANTGTTCTANTAATTGCTATGNTGTTATTNCC

Figure 2c(4)

TATCGAAGTAGCCGCCGCTGCCNTGCACGGTGGAGGAGGTGGAGGCCTGAGC
 TCGGGGGCGGGCGGGAGGGGGCGGCCACGTTAGCTCCGACAGCATGCTC
 TCGACCCAAAACNACAGGTCGGTGGGTTGTAGTCACGGTGTCCGTGGCGAGG
 GGGTGGCNAANCTGTCGTCAAGGGCGGCCNGGCCACNCCGCCATCCCCA
 TGGCCATCTCGANCTGCTCAGCTTCTGCCTCCACTTCNCCATGTCNGATGCGCG
 CNCCTTGTACCCGA

Figure 2c Continued

Figure 2c(5)

ACGGCGCGNNCCNCGNNGCTTGGGAGGGATCGGCCGCAGCGCNTANATGCTG
CTGGAGGAAGTCGACGGAGGGCGGGAGATCGAACTAGCCGCCGTGCCGTGTAC
GGTGGAGGAGGAGGTGGAGGC GTTGAGCTGC GGGGCGGGAGGGCAGCNGCT
GCACGTTNAGCTCCCACACCACGTCTCTCAACCCAACCACGACNCGTCTGTGGGG
TNGTAATNCACGGTNCCCTNGCTANGTGGGTGGCCAATCTNT

Figure 2c(6)

CACGGTGTCCGTGGCGAGGTGGTGGCGAAGCTGTCGTCGGGGCGGCCGGC
GCCACGCCGCCATCCCCATGGCCATCTCGAGCTGCTCCAGCTTCTGCCACG
TCCGCCATGTCGGAGGC CGC ACCTTGTACCCAGCGCCGCCAGCAGCNGCNCC
ACCTCCTCCCCCTCCCCCGCCGCCGACACCATCATCTTGTCTCGGACGANCC
CATGCCGCCACCGCCGCCGCGCTCCCTCCGGCGTCTGGTACTCCGCTTCATG
ATCCCGAGCTACCTCGCCTCTATCTATCTGGCCAATAATTGCGCA

Figure 2c(7)

GACCACCA CGGATGTAGTAATGTAATCCCTTCTCNTCCAGTTCTCCACCGC
CTCCATGATCACCCGTAAAAATCCTAAGCCCTATTATTACTACTATTATGTNTAA
ATGTCTATTATTGCTANGTGTAAATCCTCCAACCGCTCATATCAAATAAGCACG
GGCCGGACTTTGTTAGCAGCTCCAATGAGAATGAAATGAATTGTACGCAAGGC
ACGTCCA AAAACTGGGCTGAGCTTGTCTGTTATGTTATGGTGCTCACTG
CTCTGATGAACATGATGGTGCCTCCAATGGGTGGCTTGCAATTGTTAACGTT
TGGCTGGGGACTTGGTGNNTGGTGCATGGGAATGAANATTCCACATCCNCNG
GAATTAAAATTAGCCCATCCCG

Figure 3a

TTTCANTTCTNTCTTTCTTCTTTCCAACCCCCGGCCCCNGACCCTGGATCC
AAATCCCGAACCCGCCCGAGAACCCNGGAACCGAGGCCAAGCAAAAGNTTGCAGCC
AATTATTGGCCAGAGATAAGATAGAGAGGCGAGGTAGCTCGCGGATCATGAAGCGGG
AGTACCAAGGACGCCGGAGGGAGCAGCGCGGCCGGTGGCGGCATGGGTTCTGCGAG
GACAAGATGATGGTGTGGCGGGCGGGGGAGGGGGAGGGAGGTGGACGAGCTGC
TGGCGCGCTCGGGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAG
CTGGAGCAGCTCGAGATGGCATGGGGATGGCGGGCTGGCGCTGGCGCCGCCCC
TGACGACAGGTTNGCCACCCGNGGCCGGACACNGTCGANTACAACCCCACNGA
CNTGTCGTCTTGGGTGAGAGCATGCTGCGAGCTAAANGAGCCGNGCCGCCCC
TCCCAGCCGCCCCGAGCTCAACGCTCCACCGTACGGGAGCAGGGNTACTTNG
ATCTCCGCCCCTCAGTCGACTCCTCCAGCAGCATCTACGCGCTGCGGCCGATCCCCT
CCCCGGCCGGCGCAGGGCGCCGGACCTGTCCGCCGACTCCGTGCGGGATCCC
AAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCGTCATCCTCCTCATANTCGTCT
CTCGGTGGGGCGCCAGGAGCTCTGTGGTGGAGGCNGCCCCGCCGGTGCAGGGCG
GGCCAACGCGACGCCGCGTGGCGTGGTGGAGCAGCAGGAGGGCGTGCAGCAGGAG
TTCGGCTGGTGCACGCGCTGCTGGCGTGCAGGGAGGCCGTGCAGCAGGAGAACCTC
TCCGCCGCGAGGCCTGGTAAGCAGATAACCTTGTGGCGCGTCCCAGGGCG
CGCGATGCGCAAGGTCGCCCTACTTCGGCGAGGCCCTCGCCGCCGCGTCTCCG
CTTCCGCCCCGAGCCGGACAGCTCCCTCTCGACGCCGCCCTCGCCGACCTCCCTCCA
CGCGCACTTCTACGAGTCCTGCCCTACCTCAAGTTCGCGCACTTCACCGCCAACCA
GGCCATCCTGGAGGGCGTTGCCGGCTGCCGGCTGCCGGCGTGCACGTCGACTTCGGCAT
CAAGCAGGGGATGCAAGTGGCCGCACTTCTCCAGGCCCTGCCGTCCGGCG
CCCTCCCTCGTCCGCCCTCACCGCGTGGCCCCCGCAGCCGGACGAGACCGACGC
CCTGCAGCAGGTGGCTGGAAGCTGCCAGTTCGCGCACACCATTCCGCGTGCACTT
CCAGTACCGCGGCCCTCGTCGCCGACGCTCGCGACCTGGAGGCCGTTATGCTGCA
GCCGGAGGGCGAGGAGGACCGAACGAAGANCCGANGTAATGCCGTCAACTCA
GTCTCGAGATGCAACGGCTCGCGCAGGCCGGCCCTGGAAAAGGTTCTTGGG
CACCGTGCGCCCGTGCAGGGCCAGAATTCTCACCGTGGTGGAAACAGGAGGCAA
ATCACAACTCCGGCACATTCTGGACCGCTTCACCGAGTCTGCAACTACTCTCCA
CCATGTTGATTCCCTCGAGGGCGGCAGCTCCGGCGGACGGACCAGGTATNTCCGAGGTGT
ACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGGGGGCGAACGCACAGAN
CGCCACGAGACGCTGGGCCAGTGGCGGAACCGGCTGGCAACGCCGGTTCGAGAC
CGTCCACCTGGCTCCAATGCCATACAAGCAGCGANCACGCTGCTGGCGCTTCGC
CGGCCGGGAACGGCTACANGTGGAGAAAAGGAAGGCTGCCATGGCGCTGGGGTTGC
ACACNCCCCCTGATTGCCACCTCGGCATGGCGCCTGGCCGGCGTGAATCGCGA
GTTTGAACGCTGTAAGTACACATCGTAGGCATGGAGGACAACACAGCCCCGGCG
CCGCCGGCTCTCCGGCGAACGCACGCACGCACCGTGAAGAAGAAGAAGCTA
AATGTCATGTCAGTGAGCGCTGAATTGCAAGCGACCCGCTACGATCGATCGGCTAC
GGGTGGTTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACCTCGAGGCCGA
CCACCAACGGCATGTAGTAATGTAATTCCCTCTCGTCCAGTTCTCCACCGCCTCC
ATGATCACCCGTAACACTCTTAAGCCCTATTACTACTATTATGTTAAATGTC
TTATTGCTATGTTAATTCCCTCAACCGCTCATATCAAATAAGCACGGGCCGGACT
TTGTTANCAGCTCCAATGAGAATGAAATGAATTGTCAGCAAGGCACGTCCAAAA
CTGGGCTGAGCTTGTGTTCTGTTATGTTATGTCAGTGTGCTACTGCTCTGATGAACA
TGATGGTGCCTCCAATGGTGGCTTGCAATTGTTGAAACGTTGGCTGGGGACTT
GNGTGGGTGGGTGCATGGGGATGAATATTACATCNCCGGATAAAATTAAGCCAT
CCCCTGGCCGTCTTGAATANCTGCCNAACGAAATTCCCCCNATC

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Figure 3b

PRETTYBOX of: My.Msf(*) August 7, 1997 13:06:42.76

Gai	IERRGSSRIM	KRDHHHHHQ	DRTENMNEED	DNGNDELLA	VLGYKVRSSE	41	
Rht	KREYQDAGGS	GGGGGMGSE	DRNEDVSAAG	ECEEVDELLA	ALGYKVRASD	60	
<hr/>							
Gai	MADVAGKLEQ	LEVWES	NVQEDD	LSQOLATEEVH	YNPAELYTFL	DSWLTDLNPB	93
Rht	LEHAWMGCGV	GAGAAPDRQV	XHPXADTVX	YNPTDXSSWV	ESMLSEELXEP	120	
<hr/>							
Gai	IPPLPPAPQL	NASTVTGSGG	YXDLPPSVDS	SNAEYDEKAI	FGDAILNQFA	IDASSESNQ	123
Rht	XPPPLPPAPQL	YTTNKRLKCS	NGGARSSVVE	ESSIYAEKPI	ESPAAGATAFA	DLSADSVERDP	180
<hr/>							
Gai	KGCGCDE	YTTRGSSST	SSSSSXSSL	APPVAAAN	AESTRHUVLV	DSQENGVRLV	169
Rht	KRMRTGGSSST	GGGARSSVVE	GGGARSSVVE	ATPAPLUVVU	DTRQEGIREV	240	
<hr/>							
Gai	HALLACEAV	QKENLTVAEA	LVKQIGFLAV	BQIGAMRKVA	TYFAEALARR	IYRLSPSQ	227
Rht	HALLACEAV	QKENLSAAEA	LVKQIPFLRA	BQGCAWRKVA	AYFGEALARR	VFRFRPQPD	300
<hr/>							
Gai	SPIIDHSISDT	EQMHPYETCP	YLKFAHETAN	QALIDEAOQK	KRVHVIDESM	SQCLQWPALM	287
Rht	SLDDAAFADL	EHAAHPYSESCP	YLKFAHETAN	QALIDEAEAGC	RRVHVVDGCI	KQGMQWPALM	360
<hr/>							
Gai	QALLALRPCCP	PVERLTCIGP	PAPPDNFDLH	EVGCKLAUL	EAIHVEFEYR	GEVANTLADD	347
Rht	QALLALRPCCP	PSERLTCVGP	PQPDDETDAHQ	QVGENKLAQFA	HTERYDQYR	GLVAAATLADD	420
<hr/>							
Gai	DASMLELRPS	EIESXPXVI	AVNSVFEHLHK	VLCVVNQIK	PEIIFTVVE	Q	400
Rht	EPFMNLQPEGGE	EDPNEXPVVI	AVNSVFEEMHR	VLCVIRAPPCC	PEFXTVVE	Q	480
<hr/>							
Gai	ESNHNSPIEFL	DRFTESLHY	STLFDSLEGV	PSGQ	DKVWSSEVY	442	
Rht	EANHNSGTEFL	DRFTESLHY	STMFDSLEG	SEGGCPSEVS	GTBQVXSEVY	540	
<hr/>							
Gai	LGKQICNVVA	CDDGPDRVERH	ETLSQWRNNRF	GSAGEAAAHI	LLALENGCE	502	
Rht	LGKQICNVVA	CEGAERTXRH	ETLGCQWRNNRL	GNAGRETVHL	LLALFAAGER	600	
<hr/>							
Gai	YRVEEESDGCL	MEGWHTRPLI	ATSAEKESTN				532
Rht	LXVEEKEGCC	TBLGLHTXPLI	ATSAWREAGP				630

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Figure 4a

ACCGTCCGGAAGCCGGCGGGAGCAGCGGCCGGAGCAGCGCCGATATGGG
GTCGTGCAAGGACAAGGTGATGGCGGGGGCGGCAGGGGAGGAGGAGGACGTCT
ACGAGCTGCTGGCGCGCTGGGTACAAGGTGCGGTCGTCGACATGGCCGACG
TCGCGCAGAACCTGGAGCAGCTGGAGATGGCATGGGATGGGCGGCGTGAGCG
CCCCCGGCGCCGCGGATGACGGGTTCGTGTGACCTGGCCACGGACACCGTGC
ACTACAACCCCTCGGACCTCTCCTCCTGGGTCNGAGAGCATGCTTCGGAGTTA
AAGGCGCCGTTGCCCTTATCCGCCAGGCGCCGGCTGCCGCCATGCTTT
CCAACCTCGTCCACTGTCACCGCGCGGTGGTAGCGGCTTCTTGAANTCCCAG
CCGCTGCCANTCGTCGAGTAGCACNTACGCCCTCAGGCCGATCTCCTTACCGGT
GGTGGCGACGGCTGACCCGTCGGCTGCTGACTCGCGAGGGACACCAAGCGGAT
GCGCACTGGCGGCGGCAGCACGTCGTCGTCCTCATCGTCGTCCTCTCTGGGC
GGTGGGGCCTCGCGGGGCTGTGGTAGGGCTGCTCCGCCGGCAGCAGCAAGGG
GCCGCGGCGGCGAATGCGCCCGCCGTGCCGGTTGTGGTAGACACGCAGGAG
GCTGGNATCGGGCCTGGTGC

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Figure 4b

Wheat	IERRGSSRIM	KREYQDAGGS	GGGGGGMGSE	DMMNSAAGC	ECEEVDELLA	ALGYKVRASD	60
Rice	.....	TRPEAGGSSG	GGSSADMSE	RDKWMAGAC	EEDVDELLA	ALGYKVRSSD	50
Gai	.....	MKRDHNNHQD	.....	KKTMUNNEEIR	EGINGMDDELLA	VLGYKVRBSE	41
Wheat	MADVAKLLEQ	LEMANGMGGV	GAGAARDQV	XHPXADTVX	YNPTDXSSWV	ESMSELXEP	120
Rice	MADVAKLLEQ	LEMANGMGGV	SAPGAAADGF	VSHLATDVH	YNPSDLBSWV	ESMSELKAP	110
Gai	MADVAKLLEQ	LEMANGMGGV	.....	LNVIDD	YNPALEYTWH	ESMELTEINPB	93
Wheat	XPPLPPAPQ	LNAHLSPTIS	TUTGSGCY	XDLBPSVDSS	SSIYALRPPIP	SPACATAPAD	171
Rice	FLIPPCAG	EPAHLSPTIS	TUTGSGCSQF	FEXPAAXXSS	SBTYALRPIS	LPVVRTADPS	170
Gai	.....	.....	.....	.....	NAYDLMKATP	CDAILN...Q	112
Wheat	LSADEVRDPK	RWRTGGSSTS	SSSSSXSSLC	CGA.RSSVVE	RAPPV.AAA	ANATPALPVV	228
Rice	RADBDT	RWRTGGGSTS	SSSSSSSLG	CGASRGSVVE	APPATOCAA	ANANAPAVPVV	229
Gai	FAIDBA	.....	SSBNQGCGG	DTYTNTKRMK	CNSNGVETTT	ATREESTRHUV	157
Wheat	VVDTQEIBAG	IRLVHALLAC	AEAVQQENSL	AREALVKQIP	LLAASQGGM	RKVAAYFGEA	286
Rice	VVDTQEIBAG	IRLVHALLAC	XEAVQQENL	.....	FLAVBQIQAM	RKVHTYFEA	215
Gai	VVDTSQ	IRLVHALLAC	AEAVQKENL	.....	.....	.....	.....
Wheat	LAARRVFRFRP	QPDSEBLDA	FADLHAPPY	ESCPYLUKFAH	PTANQALBA	FLAGCRRVHV	346
Rice	LAARRVRLSP	SO.EPIDHS	LSDTLOMHPY	BTCPYLUKFAH	PTANQALBA	FLQGKKRUVU	258
Gai	LAARRVRLSP	SO.EPIDHS	.....	.....	.....	.....	273
Wheat	DEGIKQGOW	PALQALALR	PGOPPSFRLT	GVGPFQFDET	DAHQQUQWKL	AQFHHTIRUD	406
Rice	DESMSSQGLQW	PALMQALALR	PGOPPPVERLT	QIOPPPBPDNF	DYLHEVICKL	AHLAEATIVUE	333
Gai	DEYRAFWANT	LADEDASMLE	LRPSEIES	.....	.....	.....	.....
Wheat	BIOYRGGLVAAE	LADLEPMLO	PEGEEDPNEX	PXVIAVNSVE	EMHRLLAQPG	ALEKVLGHRA	466
Rice	BIYRGGLVAAE	LADEDASMLE	LRPSEIES	.....	.....	.....	258
Gai	BIYRGFWANT	LADEDASMLE	LRPSEIES	.....	.....	.....	387
Wheat	PPCGPEFXTV	YETOEAHHNS	GTPLDRFTES	LHYYSTMFDS	LBQGSGGGP	SEVSSGAAA	526
Rice	NPQIKPEIIFTV	YEVQSHNS	PIPLDRFTES	LHYYSTLFDS	LEGVPBGQ	.....	414
Gai	NPQIKPEIIFTV	YEVQSHNS	PIPLDRFTES	.....	.....	.....	.....
Wheat	PAAGTDDQVX	SEVYLGRCIC	NVVAECAER	TXRHETLQW	RNRLGNAFGE	TVHLGSNAYK	586
Rice	NPQIKPEIIFTV	YEVQSHNS	PIPLDRFTES	.....	.....	.....	258
Gai	NPQIKPEIIFTV	YEVQSHNS	PIPLDRFTES	.....	.....	.....	414
Wheat	OAXTLLALPA	GGERTLXVEK	EACLTLGHT	XPLIATSAWR	LAGP630	AAHIGSENFR	488
Rice	OASMLLALPN	GGEGYRVEES	DECLINGWHT	LISTNS32	258
Gai	OASMLLALPN	GGEGYRVEES	DECLINGWHT

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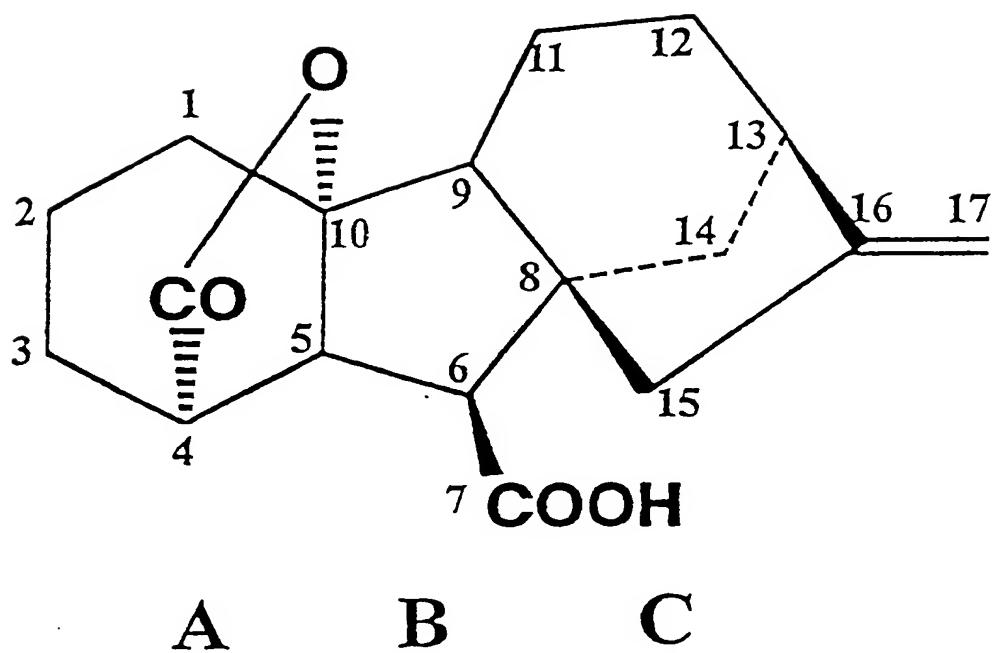
Figure 5

Figure 6a

GTCGACCCACCGTCCGGAAGCCGGCGGGAGCAGCGGC GGAGCAGCGCC
GATATGGGGTCGTGCAAGGACAAGGTGATGGCGGGGGCGGGAGGAGGA
GGACGTCGACGAGCTGCTGGCGCGCTCGGGTACAAGGTGCGGTGTCGACAT
GGCCGACGTCGCGCAGAAGCTGGAGCAGCTGGAGATGGCCATGGGGATGGGC GG
CGT GAGCGCCCCCGCGCCCGGATGACGGGTTCGTGTGCGCACCTGGCCACGGA
CACCGTGCACTACAACCCCTCGGACCTCTCCTCCTGGGTCGAGAGCATGCTTCC
GAGCTCAACCGCGCCGCTGCCCTATCCCGCCAGCGCCGCCGGCTGCCGCATG
CTTCCACCTCGTCCACTGTACCGGGCGGCGGTGGTAGCGGCTTCTTGAACTCCC
AGCCGCTGCCGACTCGTCGAGTAGCACCTACGCCCTCAGGCCGATCTCCTTACCG
GTGGTGGCGACGGCTGACCCGTCGGCTGCTGACTCGCGAGGGACACCAAGCGG
ATGCGCACTGGCGGCGGCAGCACGTCGTCCTCATCGTCGTCTCCTCTGG
GCCGTGGGGCCTCGCGGGCTCTGTGGTGGAGGCTGCTCCGCCGGCAGCAAG
GGGCCGCGGCGGAATGCGCCCGCTGCCGGTTGTGGTGGTTGACACGCAGG
AGGCTGGGATCCGGCTGGTGCACCGTTGCTGGCGTGC CGGAGGCCGTGCAGC
AGGAGAACTTC

Figure 6b

RPTRPEAGGSSGGSSADMGSCKDKVMAGAAGEEDVDELLAALGYKV RSSDMAD
VAQKLEQLEMAMGMGGVSAPGAADDGFVSHLATDTVHYNPSDLSSWVESMLSELN
APLPIPPAPPAARHASTSSTVTGGGGSGFFELPAAADSSSSTYALRPISLPVVATADPS
AADSARDT KRMRTGGSTSSSSSSSLGGGASRGSVVEAPPATQGAAAANAPAVP
VVVVDTQEAGIRLVHALLACEAVQQENF

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Figure 7a

GCCAGGAGCTCTGGTGGAGGCTGCCCGCCGGTCGCAGGCCGCGGCCAACGCG
 ACGCCCAGCCTGCCGGCTCGTGTGGACACGCAGGAGGCCGGATTGGCTG
 GTGCACGCCTGCTGGCGAGGCCGTGCAGCAGGAGAACCTCTCCGCC
 GCGGAGGCCTGGTAAGCAGATAACCTTGCTGGCCGCTCCAGGGCGGCCG
 ATGCGCAAGGTCGCCCTACTTCGGCGAGGCCCTGCCGCCGCGTCTCCGCT
 TCCGCCGAGCCGACAGCTCCCTCGACGCCGCTCGCCGACCTCCCA
 CGCGCACTTCTACGAGTCCTGCCCTACCTCAAGTTCGCGACTTCACCGCCAAC
 CAGGCCATCTGGAGGCCTCGCCGGCTGCCGCCGTCACGTCGACTTC
 GCATCAAGCAGGGATGCAGTGGCCCGACTTCTCCAGGCCCTGCCCTCCGTCC
 CGGCCGCCCTCCCTGTTCCGCTCACCGCGTCGGCCCCCGCAGCCGGACGAG
 ACCGACGCCCTGCAGCAGGTGGCTGGAAGCTGCCAGTTCGCGCACACCATC
 CGCGTCGACTTCCAGTACCGCGGCCCTCGCCGCCACGCTCGCGACCTGGAGC
 CGTTCATGCTGCAGCCGGAGGGCGAGGAGGACCCGAACGAGGAGCCGAGGTAA
 TCGCCGTCAACTCAGTCTCGAGATGCACCGCTGCTCGCGCAGGCCGGCCCT
 GGAGAAGGTCTGGCACCCTGCGCCGTGCGGCCAGGATCGTACCGTGG
 GGAGCAGGAGGCGAATACAACACTCCGGCACATTCTGGACCGCTTACCGAGTC
 TCTGCACTACTACTCCACCATGTTGATTCCCTGAGGGCGGAGCTCCGGCGGC
 GGCCATCCGAAGTCTCATGGGGCTGCTGCTGCTCTGCCGCCGGCACGG
 ACCAGGTATGTCGAGGTGTACCTCGGCCGGCAGATCTGCAACGTGGTGGCTG
 CGAGGGGGCGGAGCGCACAGAGCGCCACGAGACGCTGGCCAGTGGCGGAACC
 GGCTGGCAACGCCGGTTCGAGACCGTCCACCTGGCTCCAATGCCATACAAGC
 AGCGAGCAGCTGCTGGCGCTCTCGCCGGCGACGGCTACAAGGTGGAGG
 AGAAGGAAGGCTGCTGACGCTGGGTGGCACACGCGCCCGCTGATGCCACCT
 CGGCATGGCGCTGGCCGGCGTGATCTCGAGTGGCTACGGGTGGTCCGT
 CATCGTGAGCATGGAGGACAACACAGCCCCGGCGCCGGCTCTCCGGCG
 AACGCACGCAKGACGCACTGAAAGAAGAAGCTAAATGTATGTCAGTGAG
 CGCTGAATTGCAAGCGACCGGCTACGATCGATGGCTACGGGTGGTCCGT
 CTGGCGTGAAGAGGTGGATGGACGACGAACCTCGAGCCGACCACCGGCATG
 TAGTAATGTAATCCCTTCTCGTCCAGTCTCCACCGCCTCATGATCA~~CC~~CGT
 AAAACTCTAAGCCCTATTATTACTACTATTATGTTAAATGTCTATTATTGCTAT
 GTGTAATTCTCCAACCGCTCATATCAAATAAGCACGGCGGAAAAAAA
 AAAAAAAAAAAAAAAAAAAAAAAA
 AAAAAAAAAAAAAAAA

Figure 7b

ARSSVVEAAPPVAAAANATPALPVVVVDTQEAGIRLVHALLACEAVQQENLSAAE
 ALVKQIPLLAASQGGAMRKVAAYFGEALARRVFRFRPQPDSSLDAAFADLLHAHF
 YESCPYLKFAHFTANQAILEAFAGCRRVHVVDFGIKQGMQWPALLQALALRPGGPPS
 FRLTGVGPPQPDETDLQQVGWKLAQFAHTIRVDFQYRGLVAATLADLEPFMLQPE
 GEEDPNEEPEVIAVNSVFEMHRLLAQPGALEKVLGTVRAVRPRIVTVVEQEANHNSG
 TFLDRFTESLHYYSTMFDSLEGGSSGGPSEVSSGAAAAPAAAGTDQVMSEVYLGR
 QICNVVACEGAERTERHETLGQWRNRLGNAGFETVHLGSNAYKQASTLLALFAGGD
 GYKVEEKEGCLTLGWHTRPLIATSAWRLAGP

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Figure 8a

ATAGAGAGGCGAGGTAGCTCGCGGATCATGAAGCGGGAGTACCAAGGACGCCGG
 AGGGAGCGGCGGCAGGCTGGCGCATGGGCTCGTCCGAGGACAAGATGATGGT
 GTCGGCAGGCGGGGGGGAGGGGGAGGAGGTGGACGAGCTGCTGGCGCGCTCG
 GGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGAGAAGCTGGAGCAGC
 TCGAGATGGCATGGGATGGCGGCGTGGCGCCGGCCCCGACGACA
 GCTTCGCCACCCACCTCGCCACGGACACCGTGCACATAACCCCACCGACCTGTC
 GTCTGGGTGAGAGCATGCTGTGGAGCTCAACCGCGCCGCCGCCCTCCCG
 CCCGCCCGCAGCTCAACGCCCTCACCTCCACCGTACGGGAGCGGGCG
 ACTTCGATCTCCGCCCTCCGTCAGCTCCTCCAGCAGCATCTACCGCCTGCGGCC
 GATCCCCTCCCCGGCCGGCGACGGCGCCGGGACCTGTCCGCCACTCCGTG
 CGGGATCCAAAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCATCCTCC
 CCTCGTCGTCTCGGTGGGGCGCCAGGAGCTGTGGTGGAGGCTGCCCG
 GGTGCGGGCCCGGCCAACCGACGCCCGCTGCCGTGCGTGGTCAAC
 GCAGGAGGCCGGATTGGCTGGTGACCGCCTGCTGGCGTGCAGGCG
 GCAGCAGGAGAACCTCTCCGCCGGAGGCGCTGGTGAAGCAGATA
 ACCCTTGCTGGCGTCCCAGGGCGCGCATGCGCAAGGTGCGCC
 CCTCGCCCGCCCGTCTCCGCTTCCGCCAGCGGACAGCTCC
 GCCGCCCTCGCCGACCTCCACCGCAGCTACGAGTCTGCC
 GTTCGCGCACTCACCGCCAACCAGGCCATCCTGGAGGCGT
 CGCGTGCACGTGTCGACTCGGCATCAAGCAGGGGATGCAGTGG
 TCCAGGCCCTGCCCTCCGGCCCTCCCTCGTTCCGCC
 GGCCCCCGCAGCCGGACGAGACCGACGCCCTGCAGCAGG
 TGCGTGGCTGGAGGCCGACCTGGAGGCCGTT
 CCACGCTCGGGACTGGAGGCCGTT
 CGAACGAGGAGGCCGAGGTAAATGCCGTA
 ACTCAGTCTCGAGATGCA
 CGCAGGATCGTACCGTGGTGAGCAGGAGG
 GGCCAGGATCGTACCGTGGTGAGCAGGAGG
 TCCAGGCCCTCGCCCTCCGGCCCTCCCTCGTTCCGCC
 GGCCCCCGCAGCCGGACGAGACCGACGCCCTGCAGCAGG
 TGCGTGGCTGGAGGCCGACCGTCA
 GCTCTGCCCGCCGGCACGGACAGG
 AGATCTGCAACGTGGCTGCAGGAGTCT
 GACTACTACTCCACCATGTTGATTCC
 GAGGGCGGCAGCTCCGGCGGCC
 ATCCGAAGTCTCATCGGGGGCTGCTGCT
 GCTCTGCCCGCCGGCACGGACAGG
 AGATCTGCAACGTGGCTGCAGGAGG
 CGCTGGGCCAGTGGCGGAACCGG
 CTGGCAACGCCGGTTC
 CGAGACCGTCCACC
 TGGGCTCCAATGCCTACAAGCAGG
 CGACGGCTACAAGGTGGAGGAAGGAAGG
 GCGCCCGCTGATGCCACCTCGG
 ATGGCGCTGGCCGGCG
 TTTGAACGCTGTAAGTACACATCGT
 GAGCATGGAGGACA
 ACAGCCCCGGCG
 CTAAATGTCATGTCAGT
 GAGCGCTGAATTG
 CAGCGACCGG
 CTACGGGTGGTCC
 CGTCTGGCGTGAAGAGGTGG
 ATGGACGACGA
 ACTCCG

Figure 8b

MKREYQDAGGSGGGGGMGSSEDKMMVSAAAGEGEDEVDELLAALGYKVRASDM
 ADVAQKLEQLEMAMGMGGVGAGAAPDDSFATHLATDTVHNPTDLSSWVESMLS
 ELNAPPPPLPPAPQLNASTSSTVTGSGGYFDLPPSVDS
 SSSSIYALRPIPSAGATAPADL
 SADSVRDPKRMRTGGST
 SSSSSSSSSSLGGGARSSVVEAPPVAAAANATPALPVVV
 VDTQEAGIRLVHALLACEAVQQENLSAAEALVKQIPLLAASQGGAMRKVAAYFGE
 ALARRVFRFRQP
 DSSLLDAAFADLLHAHFYESCPYLKFAHFTANQAILEAFAGCR
 R
 VHVVDFGIKQGMQWP
 ALLQALALRPGGPPSF
 LTGVGP
 PQPDET
 DALQQVGWKL
 QFAHTIRVDFQYRGLV
 AATLADLEPFMLQPE
 GEEDP
 NEEPEVIA
 VNSVFEMHRLLAQ
 PGALEKVLGTVRA
 VRPRIVTV
 VEQEANHNSGT
 FLD
 RFTESLHYSTM
 FD
 SLEGGSSG
 GGPSEVSSAAA
 AAAGTDQM
 SEVYLGRQICNV
 VACEGAERT
 TERHETLGQWRN
 RLGNAGFETV
 HLGSNA
 YKQAST
 LLALFAGGDGYK
 VEEKEGCL
 LGWHTRPLIATSA
 WRLAGP

Figure 9a

TTTCGCCCTGCCGCTGCTATTAATAATTGCCTTCTTGGTTCCCCGTTTCGCCCGAG
CCGCTTCCCCCTCCCTACCCCTTCTTCCCCACTCGCACTTCCAACCCTGGAT
CCAAATCCAAGCTATCCCAGAACCGAAACCGAGGCCGCGAAGCCATTATTAGC
TGGCTAGCTAGGCCTGTAGCTCCGAAATCATGAAGCGCGAGTACCAAGACGCCG
GCGGGAGTGGCGGCACATGGCTCTCCAAGGACAAGATGATGGCGGGCGCG
CGGGAGCAGGGGAACAGGAGGAGGAGGACGTGGATGAGCTGCTGGCCCGCGCTC
GGGTACAAGGTGCGTCTCGTGGATATGGCGGACGTCGCGAGAACGCTGGAGCAG
CTCGAGATGCCATGGGGATGGGCGTGGCGCCGGCGTACCGCTGAT
GACGGGTTCTGTGCGCACCTCGCCACGGACACCGTGCACTAACATCCCTCCGACC
TGTCGTCCTGGGTCGAGAGCATGCTGTCCGAGCTCAACGCCCGCCAGCGCCGCT
CCCGCCCGACGCCGGCCCAAGGCTCGCGTCCACATCGTCCACCGTCACAAGT
GGCGCCGCCGCGTGGCTACTTCGATCTCCGCCCGTGGACTCGTCCA
GCAGTACCTACGCTCTGAAGCCGATCCCCTCGCCGGTGGCGGCCGTGGACTCGTCCA
CCCGTCCACGGACTCGCGCGGGAGCCAAGCGGATGAGGACTGGCGGCCAG
CACGTGTCCTCCTCTCGTGTGTCATCCATGGATGGCGGTGCACTAGGAGCT
CCGTGGTCGAAGCTGCCGCCGGCACGCAAGCATCCGCCGGCCAACGGGC
CCGCGGTGCCGGTGGTGGTGGACACGCAGGAGGCGGGATCCGGCTCGTGC
ACGCCTGCTGGCGTGCAGCGGGAGGCCGTGCAGCAGGAGAACTTCTGCGGCCGG
AGGCCTGGTCAAGCAGATCCCCATGCTGCCCTCGCAGGGCGGTGCCATGC
GCAAGGTCGCCGCCTACTTCGGCGAGGCCTGCCCCCGTGTATCGCTTCCG
CCCGCCACCGGACAGCTCCCTCTCGACGCCGCTTCGCCGACCTCTGCACGCG
CACTTCTACGAGTCTGCCCTACCTGAAGTTGCCACTTCACCGCGAACCAAGG
CCATCCTCGAGGCCTCGCCGGCTGCCGCCGTCACGTCGACTTCGGCAT
CAAGCAGGGGATGCAGTGGCCGGCTTCTCCAGGCCCTCGCCGACCTCTGCACGCG
GGCCCCCGTCGTTCCGGCTCACCGCGTGGCCGCGCAGCCGACGAGACC
GACGCCCTGCAGCAGGTGGCTGGAAAATTGCCAGTCGCGCACACCATCCGCG
TGGACTTCCAGTACCGTGGCCTCGCGGCCACGCTGCCGACCTGGAGCCGTT
CATGCTGCAACCGGAGGGCGATGACACGGATGACGAGGCCGAGGTGATGCCGT
GAACCTCGTGTTCGAGCTGCAACCGGCTTCTGCGCAGCCGGTGCCCTCGAGAAC
GTCCTGGCACGGTGCAGCGGGTGCAGGCCGAGGATCGTGACCGTGGTCGAGCAG
GAGGCCAACACAACCTCCGGCACGTTCTCGACCGCTTACCGAGTCGCTGCAC
CACCGACGCCCTCCCCGGCCGGCACGGACGGACCAGGTATGTCGGAGGT
GTACCTCGGCCGGCAGATCTGCAACGTGGTGGCGTGCAGGGCGCGAGCGCAC
GGAGCGCCACGAGACGCTGGGCCAGTGGCGCAGCCGCCCTGGCGGCTCCGGGTT
CGCGCCCGTCGACCTGGCTCCAATGCCATACAGCAGGCCGAGCACGCTGCTGGC
GCTCTCGCCGGCGACGGGTACAGGGTGGAGGAAGGACGGGTGCGCTGCCGCC
CCTGGGGTGGCATACGCGCCCGCTCATGCCACCTCGCGTGGCGCGTGCAC
GCCGCCGCTCCGTGATCAGGGAGGGGTGGTGGGGCTCTGGACGCCGATCAAG
GCACACGTACGTCCCCCTGGCATGGCGCACCCCTCCCTCGAGCTGCCGGCACGGGT
GAAGCTACCCGGGGGATCCACTAATTCTAAAACGGCCCCACCGCGGTGGAAC
CACCTTTGTTCCCTTA

Figure 9b

MKREYQDAGGS GGDMGSSKD KMMAAAAGAGEQEEEDVDELLAALGYKVRSSDM
ADVAQKLEQLEMAMGMGGVGGAGATADDGFVSHLATDTVHYNPSDLSSWVESML
SELNAPPAPLPPATPAPRLASTSSTVTSGAAAGAGYFDLPPAVDSSSSTYALKPIPSPV
AAPSAADPSTD SAREPKRMRTGGGSTSSSSSSSSMDGGTRSSVVEAAPPATQASAAA
NGPAVPVVVVDTQEAGIRLVHALLACAEAVQQENFSAAEALVKQIPMLASSQGGAM
RKVAAAYFGEALARRVYRFRPPPDSILLDAAFADLLHAHFYESC PYLKFAHFTANQAI
LEAFAGCRRVHVVDFGIKQGMQWP ALLQALRP GGPPSFRLTGVGPPQPDET DAL
QQVGWKL A QFAHTIRVDFQYRGLVAATLADLEPFMLQPEGDDTDDEPEVIAVNSVF
ELHRLLAQPGALEKVLGT VR A VRPRIVTVVVEQEA NHNSGTFLDRFTESLHY YSTMFD
SLEGAGAGSGQSTDASPAAAGGT DQVMSEVYLGRQICNVVACEGAERTERHETLGQ
WRSRLGGSGFAPVHLGSNAYKQASTLLALFAGGDGYRVEEKDGCLTLGWHTRPLIA
TSAWRVAAAAAP

Figure 10

maiz-fin	M K R E Y Q D A G G	Q . . G . . G D M	G B S K D K M M A	A A G A G E Q E E	D V D E L L A A L G	Y K V R S S D N A D	55
rht-fina	M K R E Y Q D A G G	S G G G G . . G C M	G S E E D K M M V S	A A G . . . E E E	E V D E L L A A L G	Y K V R A S D W A D	55
rice-fin	M R P T R P R A G G	S G G G S S A D M	G E C K D K M M A G	A A G . . . E E E	D V D E L L A A L G	Y K V R S S D N A D	55
M K R D H H H H H Q	D	K K T M M M N	G N D G N	E E D . . . [D G N	G N D B L L A V L G	Y K V R S S E N A D	44
gai							
maiz-fin	V A Q K L E Q L E M	A N Q W G G V C G A	G A T A D D G F V S	H U A T D T V H Y N	P E S D L S S W V E S	M L S E L N A P P A	115
rht-fina	V A Q K L E Q L E M	A N Q W G G V C G A	G A A A D D S P A T	H U A T D T V H Y N	P E S D L S S W V E S	M L S E L N A P P P	114
rice-fin	V A Q K L E Q L E M	A N Q W G G V S H V P	G A . A D D G P V S	H U A T D T V H Y N	P E S D L S S W V E S	M L S E L N A P P P	114
gai	V A Q K L E Q L E V	M M S	N V Q [E D D I B	Q L A T E T V H Y N	P A B E Y T W H D E	M L T D L N P P	93
maiz-fin	P L P P A T P A D R	L A S T S S T V T S	G A A N G A G Y F D	L B P P A V D S S S S	T Y A L K P I P S P	V A A . P S A D P S	174
rht-fina	P L P P A P O L R	L A S T S S T V T	G . G S G G Y P D	L P P S V D S S S S	I Y A L R P I P S P	A G A T A P A D L S	168
rice-fin	P T P P A P P A R	L A S T S S T V T G	G . G G S G F F E	L P P A A D S S S S	T Y A L R P I S L P	V V A T A D P S . A	171
gai							
maiz-fin	T D S A R E P K R M	R T G G C S T S S S	S S S S S S S M D G G	R T R S S V V E A A	P P A T Q A S A A A	N G P A V P V V V	234
rht-fina	A D S V R D P K R M	R T G G S S T B S S	S S S S S S L G G G	A R S S V V E A A	P P V . A A A A A	A T P A L P V V V	225
rice-fin	A D S A R D T K R M	R T G G G S T T S S S	S S S S S S L G G G	A S R G S V V B A A	P P A T Q G A A A A	N A P A V P V V V	231
gai							
maiz-fin	D T Q B A G I R L V	H A L L A C A E A V	Q O E N F S A A E A	L V K Q I P N L A S	B O G G A M R K V A	A Y F G E A L A R R	294
rht-fina	D T Q B A G I R L V	H A L L A C A E A V	Q O E N F B A A E A	L V K Q I P L L A	B O G G A M R K V A	A Y F G E A L A R R	285
rice-fin	D T Q B A G I R L V	H A L L A C A E A V	Q O E N F T V I E A	L V K Q I G F L A V	B O I G A M R K V A	T Y F A E A L A R R	256
gai	D S Q E N G M V R L V	H A L L A C A E A V					219
maiz-fin	V Y R E R P P P D S	S L U D A A F A D L	L H A H P X E S C P	Y I L K P A H F T A N	Q A I L E A F A G C	R R V H V V D F G I	354
rht-fina	V Y R E R P P D S	S L U D A A F A D L	L H A H P Y E B C P	Y I L K P A H F T A N	Q A I L E A F A G C	R R V H V V D F G I	345
rice-fin	A Y R I N S P S Q	S P I P D H S I S D T	L O M H F Y E T C P	Y I L K P A H F T A N	Q A I L E A F O G K	K R V H V T D F S N	277
gai							
maiz-fin	K Q G M Q W P A L L	Q A I A L R P G G P	P S F F R L T G V G P	P Q P D E T D A L Q	Q V G W K L A Q F A	H T I R V D F Q Y R	414
rht-fina	K Q G M Q W P A L L	Q A I A L R P G G P	P S F F R L T G V G P	P Q P D E T D A L Q	Q V G W K L A Q F A	H T I R V D F Q Y R	405
rice-fin	S Q G M Q W P A L L	Q A I A L R P G G P	P V P R L T G V G P	P A P D N F D Y L I I	E V G C K L A M E A	E A I H V E F E Y R	256
gai	S Q G M Q W P A L L						337
maiz-fin	G L V A A T L A D L	E P P M L Q P E G E	W D T D D E P E V I	A V N S V F E L H R	L L A Q P G A L E K	V L G T V R A V R P	473
rht-fina	G L V A A T L A D L	E P F M L Q P E G E	W D D P N E E P E V I	A V N S V F E L H R	L L A Q P G A L E K	V L G T V R A V R P	465
rice-fin	G M V A N T L A D L	E R S M L	E L R P S E I E S M	A V N S V F E L H R	L L C R P G A I D K	V L G V V N Q F K P	256
gai							392

Figure 10 (Continued)

maiz-fin	RIVTVVVEQEA	NHNSGTFLDR	FTEBLHYYST	MFDSELQAGCA	GSGCQSTDASP	AAGGT	529
rht-fina	RIVTVVVEQEA	NHNSGTFLDR	FTEBLHYYST	MFDSELQAGCA	GCGPBEVSBG	AAAPAPAGT	525
rice-fin	EIFTVVVEQES	NHNSPIFLDR	FTEBLHYYST	MFDSELQAGCA	GCGPBEVSBG	AAAPAPAGT	256
gai	EIFTVVVEQES	NHNSPIFLDR	FTEBLHYYST	MFDSELQAGCA	GCGPBEVSBG	AAAPAPAGT	434
maiz-fin	DQVMSEVYLG	RQICNVVACE	GAERTERHET	LQOWRSRLGC	SQFAPVHLOG	NAVKQASTLL	589
rht-fina	DQVMSEVYLG	RQICNVVACE	GAERTERHET	LQOWRNRLGN	AGEETVHLGS	NAVKQASTLL	505
rice-fin	DKVMSEVYLG	RQICNVVACD	GRIPRVERHET	LISQWNRNFGS	AGEFAAHIGS	NAVKQASTLL	256
gai	DKVMSEVYLG	RQICNVVACD	GRIPRVERHET	LISQWNRNFGS	AGEFAAHIGS	NAVKQASMLL	494
maiz-fin	ALFAGGDDGYR	VEEKDGCLTL	GWHTTRPLIAT	SAWRVAARAA	P	630	
rht-fina	ALFAGGDDGYR	VEEKDGCLTL	GWHTTRPLIAT	SAWRLAGP	P	623	
rice-fin	ALFNGGDDGYR	VEEISDGCLML	GWHTTRPLIAT	SAWKESTN	P	256	
gai	ALFNGGDDGYR	VEEISDGCLML	GWHTTRPLIAT	SAWKESTN	P	532	

Figure 11a

TACCAAGACGCCGGCGGGAGTGGCGGCGACATGGGCTCCTCCAAGGACAAGATG
ATGGCGGCGGCAGGGAGCAGGGAAACAGGAGGAGGACGTGGATGAGCT
GCTGGCCGCGCTCGGGTACAAGGTGCGTCTCGGATATGGCGGGGCTGGAGCA
GCTCGAGATGGCCATGGGGATGGCGCGTGGCGCCGGCGCTACCGCTGA
TGACGGGTTCTGTGCGCACCTGCCACGGACACCGTGCACTACAATCCCTCCGAC
CTGTCGTCTGGTCGAGAGCATGCTGTCCGA

Figure 11b

YQDAGGSGGDMSSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDMAGLEQ
LEMAMGMGGVGGAGATADDGFVSHLATDTVHYNPSDLSSWVESMLS

Figure 11c

TCCTCCAAGGACAAGATGATGGCGGCGGCGGGAGCAGGGAACAGGAGGA
GGAGGACGTGGATGAGCTGCTGGCCGCGCTCGGGTACAAGGTGCGTTCGTCGGA
TATGGCGGACGTCGCGCAGAAGCTGGAGCAGCTCGAGATGGCCATGGGGATGGG
CGGCGTGGCGGCCGGCGCTACCGCTGATGACGGGTTCGTGTGCGCACCTGTCG
TCCTGGGTGAGAGCATGCTGTCCGAGCTAACGCGCCCCAGCGCCGCTCCCGC
CCGCGACGCCGGCCCCAAGGCTCGTCCACATCGTCCACCGTCACAAGTGGCGC
CGCCGCCGGTGCTGGCTACTCGATCTCCGCCGTGGACTC

Figure 11d

SSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDMADVAQKLEQLEMAMGM
GGVGGAGATADDGFVSHLSSWVESMLSELNAPPAPLPPATPAPRLASTSSTVTSGAA
AGAGYFDLPPAVD

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Figure 12a

GC GG CG CT CG GG TAC AAG GTG CG CG CCT CC GAC AT GG CG GAC GT GG CG CAG AAG
CT GG AG CAG CT CG AG AT GG CC AT GG GG AT GG CG CG GT GG CG CC GG CG CC GC
CC CG AC GAC AG CT TC GG CC ACC CAC CT CG CC AC GG AC ACC GTG CACT AC AA ACC CC
CC GAC CT GT CG TCT GG GT CG AG AG CAT GT CG GAG CT CA AC GG CT CC AC CT C
CT CC ACC GT CA CG GG CAG CG CG GT ACT TC GAT CT CC CG CC CT CG TC GACT CC
TCC AG CAG CA TCA CG CG CT CG GG CC AT CC CC CT CC CC GG CG CG AC GG CG
CG GG CG AC CT GT CC GG CC ACT CC GT CG GG AT CC CA AG CG GAT CG CG ACT GG CG
GG AG CAG CA CCT CG TC GT CA CCT CCT CCT CG TC

Figure 12b

A ALGY KVRAS DMAD VAQ KLE QLEM AM GMGG VGAGA AP DDS FATH LAT DTVHYN
PT DLSS WVE SML SEL NASTS STV TGSGGYFDLPPSVDSSSIYALRPI PAGA TAPAD
LSAD SVRDPKRMRTGGSSSTSSSSSS